

STATEMENT OF WORK (SOW)
HEADQUARTERS US PACIFIC COMMAND (HQ USPACOM)
SPECTRUM MONITOR AND DIRECTION FINDING UPGRADE

1. Background:

- 1.1 The USPACOM J653, Joint Frequency Management Office Pacific (JFMOPAC) has the responsibility of management and control of the electromagnetic environment (spectrum) used by the Dept. of Defense in the Hawaii area of operations. Inherent in this control is the rapid resolution of the electromagnetic interference. Per CJCSI 3320.02, the JFMOPAC is responsible to provide assistance, identify and resolve electromagnetic interference in the electromagnetic environment before engaging national assets. In order to resolve spectrum interference and maintain positive control and management of the congested electromagnetic environment, the tools to determine the theater spectrum source are required.
- 1.2 The spectrum monitoring and direction finding (DF) equipment and antenna unit are located on Camp H.M. Smith, Oahu, Hawaii. DF unit is housed inside building 20 network utility room on the main entrance floor. The antenna is mounted on the top of a 30-foot tower located on building 20. A coaxial and a control cable connect the DF unit with the antenna. The cables are routed from the rear of the DF unit through the exterior building wall, travels vertically to the roof and up to the top of the 30-foot tower mounted antenna. The cables are covered by a cylinder conduit and capped with silicone at the base of the tower. The control cable is connected to a power supply unit collocated with antenna and attenuates the signal between the DF unit and the antenna. Both the coaxial and control cable are linked between the two antenna elements. The DF unit is commanded and controlled by a desktop remote computer (PC) located at building 700, room #124. A fiber optic/CAT 5 modem located at each location link the PC, fiber optic circuit and DF unit. The ARGUS software is used to control the DF unit.

2. Work Statement:

- 2.1 The contractor will update the current spectrum monitor and direction finding equipment (DF) and software procured in 2003. The upgrade will allow enhanced monitoring and bearing to effected signal up to 6GHz from a fixed unobstructed location; the DF unit will provide this capability. Along with the deployment of the office and component command portable spectrum monitoring unit, this upgrade provides support to JFMOPAC in identifying and resolving radio frequency interference on the island of Oahu. The DF unit allows for a more robust and versatile spectrum analyzing that is fixed station capable, transportable and functional for field use. This will allow for positive control of the electromagnetic environment and EMI problems quickly and efficiently.
- 2.2 The contractor will integrate and test equipment prior to shipping unit. Contractor will integrate, finalize and provide training at during a five-workday period onsite at Camp Smith. DF unit will replace, plug and play in the existing system. The contractor will provide a new PC with ARGUS software preloaded to work with existing fiber optic modem and DF unit for turnkey operations. The contractor will provide technical support; the equipment comes with a one year warranty.
- 2.3 Contractor will provide installation, testing and (3) days of training. Dates to be agreed upon by all parties after contract award.
 - Day 1 - Integrate and test equipment
 - Day 2 - Finalize testing
 - Day 3 - Training on ARGUS Software
 - Day 4 - Training on ARGUS Software
 - Day 5 - Training on ARGUS Software
- 2.4 Site Location: BLDG 700, HQ USPACOM, Camp H. M. Smith, Hawaii, 96861

3. Technical Point-Of-Contact:

- 3.1 Mr. Heriberto Rivera, heriberto.rivera@pacom.mil (808) 477-7242.